

Opportunities for State-Level Action to Reduce Firearm Violence: Proceeding From the Evidence

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Firearm violence remains an important problem, and a large body of evidence shows that guns used in crime follow generally predictable paths from manufacturer to criminal end user.

Policy initiatives based on that evidence have been shown to be effective. A recently published study conducted by a leading policy organization presents new evidence and makes specific recommendations for action by state-level policymakers.

Unfortunately, the study's analysis is overly simplified, and the recommendations are therefore misleading. We suggest alternatives that are evidence based. (*Am J Public Health*. 2011;101:e1–e3. doi:10.2105/AJPH.2011.300238)

FIREARM VIOLENCE REMAINS

a pressing public health and public safety problem. In the United States, an estimated 326 090 violent crimes were committed with firearms in 2009.¹ An estimated 11 406 people died as a result of firearm homicides that year, and another 44 466 people were estimated to have been treated in hospital emergency departments for gunshot wounds sustained in firearm assaults.^{2,3}

WHERE CRIME GUNS COME FROM

Since the 1970s, studies by the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF)^{4–9} and academic researchers^{10–12} have shown that guns used in crime follow generally predictable paths from manufacture to criminal use. These studies have relied on crime gun tracing, conducted by ATF, which tracks a gun used in crime from its manufacturer to its first retail purchaser.¹³

Among the principal findings of these studies are the following. First, new guns figure disproportionately in crime, and this is particularly important for guns that are thought to have been trafficked, that is, acquired with criminal intent and transported, often across state lines, for criminal purposes.^{4–12} Second, some licensed firearm retailers are disproportionately frequent sources of crime guns; these retailers are linked to more guns traced by ATF than would be expected from their overall volume of gun sales.^{14,15}

Third, under test conditions significant proportions of licensed retailers and private-party gun sellers will knowingly participate in illegal gun sales.^{16–18} Fourth, on average, about one third of guns used in crime in any community are acquired in that community, another third come from elsewhere in the same state, and a third are brought from other states.^{4–12} Finally, there are long-standing interstate trafficking routes for crime guns, typically from states with relatively lax gun regulations to others where guns are more difficult to acquire. The best known of these routes is the “Iron Pipeline” from the Southeast to the Middle Atlantic and New England.

EFFECTIVE MEASURES

It also appears that state laws regulating gun commerce can affect gun trafficking and reduce the incidence of illegal and high-risk gun sales. Laws regulating gun retailers and laws requiring background checks for all sales of handguns—wherever those sales may occur, and including sales by private parties—are independently associated with reductions in intrastate gun trafficking.¹⁹

California requires background checks for all gun sales (handguns, rifles, and shotguns are treated equally). These background checks are associated with a 25% to 30% reduction in risk of arrest for later crimes involving guns or violence on the part of the prohibited individuals who are detected and whose purchases are

denied.^{20,21} California also directly regulates gun shows and gun retailers. Together with the background check requirements, these policies have measurable and beneficial effects at gun shows,²² including a reduced incidence of the illegal, surrogate gun purchases (known as “straw” purchases) that are an important supply source for gun trafficking operations.²³

A PROBLEMATIC NEW STUDY

The newest study focusing on crime guns is Trace the Guns, an analysis of the effectiveness of state laws in controlling interstate gun trafficking by the advocacy group Mayors Against Illegal Guns.²⁴ Led by Michael Bloomberg of New York City and Thomas Menino of Boston, Massachusetts, Mayors Against Illegal Guns represents more than 500 elected officials from across the country. The study generated substantial media attention^{25–30} and may be influential in the public health community and among policymakers. Unfortunately, it contains important flaws that result in misleading conclusions.

Trace the Guns relies on two principal measurements. One is each state's crime gun export rate: the number of guns sold in that state (with the size of the state's population taken into account) and later traced by ATF after use in crime elsewhere. The other is whether and to what extent a state is a net exporter or importer of

crime guns (i.e., of the guns that cross its borders and are used in crime later, how many more or fewer guns go out than come in).

The study compared states with and without each of 10 gun control laws with respect to the states' performance on these measurements. It concluded that "[e]ach of the ten laws are strongly associated with lower crime gun[sic] export rates."^{24(p10)} That conclusion is misleading in its implication that each law has an independent effect on crime gun exports. Such a determination could be made only if the effect of each law were assessed while controlling for the potential effects of the others, as demonstrated by Webster et al. in the case of intrastate trafficking.¹⁹ This approach was not taken in *Trace the Guns*, and as pointed out in the report, states with low crime gun export rates had adopted on average 8.4 of the 10 gun control laws assessed in the study. As presented in the report, an analysis of the effect of any single gun control law is actually an analysis of the combined effects of all gun control laws adopted by the states that had adopted the single law in question and of any other differences between those states and others.

In addition, *Trace the Guns* incorrectly combined 16 states' widely varying requirements for background checks on private-party gun sales into a single category: the requirement for background checks on private-party sales of handguns at gun shows. On the basis of results for all 16 states, the report concluded that a handgun-only, gun show-only requirement for background checks reduces a state's importance as a source of crime guns. However, only two states have in place precisely that requirement (not four, as claimed in the report).

Those states, Colorado and Oregon, are identified in the report as net exporters of crime guns and have crime gun export rates that rank in the middle of the 50 states.

Other states have more inclusive background check requirements, including six states that mandate background checks for all private-party gun sales, wherever those sales occur. Of those six states—California, Hawaii, Illinois, Massachusetts, New Jersey, and Rhode Island—all but Hawaii were found in *Trace the Guns* to be net importers of crime guns, and all six were among the 10 states with the lowest crime gun export rates. The report's endorsement of a background check requirement only for handgun sales at gun shows is based on a faulty analysis. The finding on which that endorsement is based is actually attributable to states that have adopted universal background check requirements.

MOVING FORWARD

We agree entirely with the *Trace the Guns* researchers and Mayors Against Illegal Guns that our current level of firearm violence is intolerable. Efforts to address the problem must rest on a solid foundation of scientific evidence. A requirement that all gun sales include a background check on the prospective purchaser and comprehensive state-level regulation of firearm retailers are among the well-supported opportunities for action by state-level policymakers. ■

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Contributors

G. J. Wintemute led the conceptualization of and drafted the article. A. A. Braga assisted with the conceptualization of and contributed to the article.

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